

What is claimed is:



1. A steering device for toy, comprising:  
right and left turning members for turning right and left steering wheels in clockwise and counterclockwise directions around each predetermined shaft; and

a connecting member for connecting the right and left turning members with each other and for forming a turning pair with each turning member;

wherein the right and left turning members are turned around each predetermined shaft by shaking the connecting member in right and left directions so as to change each direction of the steering wheels;

one of a coil and a magnetic body is provided on the connecting member, the other of the coil and the magnetic body is fixed to a fixing portion, and the coil and the magnetic body come close to and go away from each other by shaking the connecting member; and

the connecting member takes at least two steering positions by controlling a current to be carried to the coil with a coil current carrying unit.

2. The steering device for toy as claimed in claim 1, wherein the magnetic body is a permanent magnet and is provided on the connecting member, and the coil is fixed to the fixing portion.

3. The steering device for toy as claimed in claim 2, wherein the permanent magnet is provided so as to direct two poles of the permanent magnet to right and left directions, and the coil is provided so as to face an edge portion of the coil to one of the two poles.

4. The steering device for toy as claimed in claim 1, wherein the connecting member comprises a spring for keeping the connecting member in a neutral position in which the connecting member is not biased toward a right direction nor a left direction when the current is not carried to the coil; and

the connecting member takes three steering positions.


5. A steering device for toy, comprising:  
right and left turning members for turning right and left steering wheels in clockwise and counterclockwise directions around each predetermined vertical shaft;

a connecting member for connecting the right and left turning members with each other and for forming a turning pair with each turning member;

an electromagnetic force applying member for applying an electromagnetic force for shaking the connecting member in right and left direction; and

a current carrying control unit for controlling an operation of the electromagnetic force applying member.

6. A running toy comprising:



a steering device for toy, comprising: right and left turning members for turning right and left steering wheels in clockwise and counterclockwise directions around each predetermined shaft; and a connecting member for connecting the right and left turning members with each other and for forming a turning pair with each turning member; wherein the right and left turning members are turned around each predetermined shaft by shaking the connecting member in right and left directions so as to change each direction of the steering wheels; one of a coil and a magnetic body is provided on the connecting member, the other of the coil and the magnetic body is fixed to a fixing portion, and the coil and the magnetic body come close to and go away from each other by shaking the connecting member; and the connecting member takes at least two steering positions by controlling a current to be carried to the coil with a coil current carrying control unit.

7. The running toy as claimed in claim 6, further comprising a suspension for moving the right and left turning members in upper and lower directions in a predetermined range; the suspension comprising a biasing member which is supported in a middle of a width direction of the running toy so that right and left edge portions of the biasing member are elastically deformable in upper and lower directions and which extends on

the right and left turning members; wherein the turning members are pressed with the right and left edge portions by a biasing force which is caused by elastically deforming the biasing member, so that the right and left steering wheels are in contact with a ground.

8. The running toy as claimed in claim 6, further comprising: a suspension for the running toy comprising two wheel shafts for attaching right and left wheels; the suspension comprising a biasing member which is elastically deformable in upper and lower directions and is in contact with the wheel shafts in a middle of a width direction of the running toy; wherein the wheel shafts are movable in the upper and lower directions in a predetermined range; the wheel shafts are constructed so as to perform a seesaw motion by taking a contact point with the biasing member as a fulcrum; and the turning members are pressed at the contact point by a biasing force which is caused by elastically deforming the biasing member, so that the right and left steering wheels are in contact with a ground.

9. The running toy as claimed in claim 6, further comprising: a suspension for the running toy comprising two wheel shafts for attaching right and left wheels; the suspension comprising a biasing member which extends on the wheel shafts and is supported in a middle of a width direction of the running toy so that right and left edge portions of the biasing member

are elastically deformable in upper and lower directions; wherein the wheel shafts are movable in the upper and lower directions in a predetermined range; and the wheel shafts are pressed with the right and left edge portions by a biasing force of the biasing member so that the right and left steering wheels are in contact with a ground.

10. A running toy comprising:

a steering device comprising: right and left turning members for turning right and left steering wheels in clockwise and counterclockwise directions around each predetermined vertical shaft; a connecting member for connecting the right and left turning members with each other and for forming a turning pair with each turning member; an electromagnetic force applying member for applying an electromagnetic force for shaking the connecting member in right and left direction; and a current carrying control unit for controlling a current to be carried to the electromagnetic force applying member, so that the connecting member takes at least two steering positions; and

a suspension device for pressing the right and left turning members which are movable in upper and lower directions in a predetermined range, so that the right and left steering wheels are in contact with a ground.